

**Byzantine notation in the eighth-tenth centuries.  
On oral and written transmission of early Byzantine chant.\***

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During the recent decades theories on the creation and use of musical notation in Byzantium and the Latin West have attracted significant interest. The present paper has been written in a situation where certain new data permit to form a cumulative overview of the way in which musical creation was recorded and transmitted in Byzantium during the eighth to tenth centuries, if not earlier.

The period extending from the time when the last musical monument written in ancient Greek notation until the moment when diversified systems for the writing of music emerged and were used within the framework of Byzantine ecclesiastical music has provoked the interest of musicologists. This period, however, is marked by a lack or limited existence of direct and indirect sources. Let us therefore begin by listing the few available data.

It was during the second half of the third century AD that the last musical source using the ancient Greek notational system P<sub>Oxy</sub> 1786<sup>1</sup> was written. This musical monument conveys a fragment of a Christian hymn and might be considered a bridge connecting Greek antiquity with the early Christian period.

In the following centuries, the scene changed radically. No direct musical source whatsoever has been found. It is a fact that the fourth and fifth centuries mark the definitive domination of Christianity over the Greco-Roman civilization. The stance taken by Theodosius I against idolaters, which reached the point of real persecution, is, in any case,

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<sup>1</sup> B. P. GRENFELL-A. S. HUNT, *Oxyrhynchus Papyri*, 15 (1922), pp. 21-25, fig. 1, E. PÖHLMANN, *Denkmäler altgriechischer Musik*, Nürnberg 1970, pp. 106-107, 108-109.

well known<sup>2</sup>. It seems, finally, that the events of that time were such that they were able to stop and cast the previous notational system into oblivion.

During the four centuries that followed, most of the material regarding Byzantine musical notation that has come down to us stems from direct and indirect sources from the territory of the Byzantine Empire and is written in Greek. Among the sixth- and seventh-century papyri with hymnographic texts, and often with modal indications too<sup>3</sup>, are some that may testify to the use of a simple notational system. Examining the sherd *Ostr. Skeat* 16, which originated in the sixth or seventh-century Egypt, Youtie observed that some symbols, such as the *stauros*, the *stigme* and a sort of *perispomene* accompanying fragments of a Christian hymn, represent some type of musical notation<sup>4</sup>.

In her 1995 study *Christliche literarische Texte und Urkunden aus dem 3. bis 8. Jh. n. Chr.*, Panagiota Sarischouli published – along with other papyri – a number of fragments from P.Berol. 21319<sup>5</sup>. These fragments contain hymns to the Virgin Mary and date from the mid-sixth to mid-seventh centuries<sup>6</sup>. We consider this publication to be of great

<sup>2</sup> Ε. ΓΛΥΚΑΤΖΗ-ΑΡΒΕΛΕΡ, *Η πολιτική ιδεολογία της βυζαντινής Αυτοκρατορίας*, translation by T. Δρακόπουλος, 4<sup>th</sup> ed., Αθήνα 1992, pp. 17, 24.

<sup>3</sup> It seems that the roots of the eight-mode system used both in Byzantium and in the west lie in the eastern provinces, probably around the 6<sup>th</sup> century if not earlier, see Α. ΑΛΥΤΙΖΑΚΗΣ, *Η Οκταχία στην ελληνική λειτουργική υμνογραφία*, Θεσσαλονίκη 1985, K. ΜΗΤΣΑΚΗΣ, *Βυζαντινή Υμνογραφία, από την εποχή της Καινής Διαθήκης έως την Εικονομαχία*, Αθήνα 1986, pp. 200-201, see C. H. ROBERTS, *Catalogue of the Greek and Latin Papyri in the John Ryland's Library at Manchester*, vol. IV, Manchester 1952, p. 32.

<sup>4</sup> H. C. YOUTIE, *Greek Ostraca from Egypt*, (*Scriptiunculae*, 1), Amsterdam 1973 [1950], pp. 227 (113) and 230 (116).

<sup>5</sup> P. SARISCHOULI, *Christliche literarische Texte und Urkunden aus dem 3. Bis 8. Jh. n. Chr.*, (*Serta Graeca*, Band 3), Wiesbaden 1995, pp. 48-55.

<sup>6</sup> The researcher does not rule out a dating in the 8<sup>th</sup> century, SARISCHOULI, *Christliche literarische Texte*, op.cit., p. 54.

importance as hook-shaped musical signs can be discerned in one hymn<sup>7</sup>. These signs are considered by the author to be precursors of the *petaste*<sup>8</sup>.

We have earlier presented a study of five Greek manuscript sources containing Christian hymnographic texts of Coptic origin<sup>9</sup>. We are inclined to think that these manuscripts (Ryland Copt. 25, 26, 27, 28, 29) present an organized diastematic notational system that we have named the “*Hermoupolis notation*”<sup>10</sup>. Paleographically these musical monuments can be placed between the seventh and ninth centuries. A substantial number of syllables in the poetic text are accompanied by musical signs, of which a sign similar to the *oxeia* is prevailing. The number of syllables with notation varies a great deal. The *oxeia* signs accompanying one syllable fluctuates from one to seven in number, followed (in order of frequency) by signs shaped like *elaphron*, the *stigme*, the *hyporroe* and the *bareia*<sup>11</sup>. After the Oxyrhynchus papyrus, these seem to be the oldest Greek sources that enable us to decode a musical system<sup>12</sup>.

<sup>7</sup> Only the first verse of the hymn is extant, and we cannot rule out the possibility that the entire poetic text of the hymn was accompanied by musical notation.

<sup>8</sup> Cf. K. ΨΑΧΟΣ, *Η Παρασημαντική και τα Μαθήματα της Βυζαντινής Μονοτικής*, 2<sup>nd</sup> ed., Αθήνα 1978, p. 22 note 13. Psachos claims that St. John of Damascus introduced musical signs with a hooklike shape, a view which comes somewhere between myth and reality, but the coincidence is nevertheless worth noticing.

<sup>9</sup> I. PAPATHANASIOU - N. BOUKAS, *Early Diastematic Notation in Greek Christian Hymnographic Texts of Coptic Origin. A Reconsideration of the Source Material*, στο *Acts of a Congress Held at the Hernen Castle, the Netherlands, 1-4 March 2001*, forthcoming.

<sup>10</sup> The name of the notation comes from the geographical area where the manuscripts were found (Hermoupolis in Egypt), see PAPATHANASIOU - BOUKAS, *Early Diastematic Notation*, op. cit.

<sup>11</sup> We follow here the nomenclature of later Byzantine notational systems.

<sup>12</sup> The transcriptions of two hymns (*Ἐπι σοι χαιρεῖ καὶ χαριτωμένη, Ιδού ετεχθῆ* ημιν σημερον) were performed for the first time by the Greek Byzantine Choir under the direction of Lycourgos Angelopoulos at the XXe Congrès international des Études Byzantines (Paris 19-25 août 2001).

It is likewise noteworthy that in Egypt there was a notation that used “variously sized and varicolored circles, ranging in diameter...”. According to Gulezian this “unique group of documents of coptic notation, the positive recognition that the manuscripts are among the very few remnants in existence of graphic description of Ptolemy’s ‘Harmonia Mundi’ and that the manuscripts possess the graphic

Yet another significant finding which testifies to the existence of a rudimentary type of musical notation is the palimpsest *Garrett 24* in the Firestone Library, Princeton. While examining this codex in 1992, Jørgen Raasted noted that beneath the eleventh-century Georgian text lies the oldest known fragment of a *Heirmologion* of Palestinian origin, dating from the eighth century. The underlying text presents several *heirmoi* in ode order, attributed to St. John of Damascus, St. Andrew of Crete, and Cosmas the Monk. Only one musical sign, the *oxeia*, can be distinguished in the manuscript, but it should be noted that at the same point in later manuscripts there is invariably a *thematismos* sign. Raasted points out that this *Theta Notation* “... far from being a South-Italian speciality of no importance, this ‘notation or quasi notation’ was widely spread, in sources dating from the eighth through the sixteenth century (or even later) and used over a wide area, in Greek, Slavonic, and Syro-Melkite liturgical manuscripts”<sup>13</sup>.

The first dated manuscripts bearing so-called Ekphonetic Notation<sup>14</sup> have been placed in the ninth century. It has, however, been suggested that this notation first appeared in the fourth century AD. It is a

*coordination of this early Egyptian-Christian conception of the gnostic period seems to place the date as of the fifth to the seventh century A.D.*”, see H. ARAM GULEZIAN, *An Early Christian Musical Manuscript of six Leaves Originating in Egypt about the Fifth to the Seventh Century of Coptic Origin, Belonging to the Earliest Remnant of Christian Musical Notation*, New York 1952. Of course, on these six parchment leaves described by Gulezian there are just a few isolated words and phrases in both Greek and Coptic along with the musical signs, and thus it is difficult to decide in which category of source material they should be classified: Greek or Coptic. Moreover, the use of minuscule writing in the 5<sup>th</sup>-6<sup>th</sup> c. should make us wonder about the proposed dating of these sources. Nonetheless, we have yet another diastematic notational system used on the local level in Egypt.

<sup>13</sup> J. RAASTED, *Theta Notation and some Related Notational Types*, in *Palaeobyzantine Notations. A Reconsideration of the Source Material*, (ed. J. RAASTED and CHR. TROELSGÅRD), Hernen 1995, pp. 57-62, esp. p. 57, IDEM, *The Princeton Heirmologion Palimpsest*, in *CIMAGL* 62 (1992), pp. 219-235.

<sup>14</sup> C. HØEG, *La Notation Ekphonétique*, (*Monumenta Musicae Byzantinae, subsidia I, 2*), Copenhagen 1935, S. G. ENGBERG, *Greek Ekphonetic Notation*, in *Palaeobyzantine Notations. A Reconsideration of the Source Material*, (edd. J. RAASTED and CHR. TROELSGÅRD), Hernen 1995, pp. 33-55.

system that until it was abolished in the fourteenth-fifteenth centuries was used almost exclusively for the recitation of passages from the gospels, apostolic epistles and prophetic texts.

The first examples of a widespread notational system in musical manuscripts date from the tenth century and divide into two different forms: the *Athonite* or *Chartres* and the *Coislin* notations. They appear apparently during the same period but in different geographical regions, following different paths as they evolved and changed at different paces<sup>15</sup>. It is noteworthy that in one of the oldest manuscripts that has come down to us with *Chartres* notation (MS Athos Laura Γ. 67, 10<sup>th</sup> c.) a full notational system is set out<sup>16</sup>. This system may well have been invented and applied long before the manuscript was written. On folio 159r is a table containing the shapes and names under the rubric “μελωδήματα”<sup>17</sup>. The very existence of this table may testify to a sort of notational crystallization of these signs in liturgical practice. Thus the roots of both the *Chartres* and *Coislin* notations should be sought in a much earlier period, perhaps even before the iconoclastic conflict.<sup>18</sup>

<sup>15</sup> C. FLOROS, *Universale Neumenkunde*, Band I, Kassel 1970, pp. 305-326.

<sup>16</sup> The role of early Byzantine notation was mnemonic, constituting a substantial aid to chanters already familiar with the melodies, see J. RAASTED, *Formulaism and Orality in Byzantine Chant*, in *Cantus Planus*, Budapest 1992, pp. 231-240, esp. p. 231. This conclusion may easily be reached through study of the *Chartres* and *Coislin* notations, and particularly of the way in which these gradually acquired greater diastematic precision in order to convey the melodic movement of the voice in the greatest detail possible.

<sup>17</sup> In the sense of the signs that are chanted. The word comes from the verb μελωδώ, which means 'to sing' or 'chant', see Γ. ΜΠΑΜΠΙΝΙΩΤΗ, *Λεξικό της Νέας Ελληνικής Γλώσσας*, Αθήνα 1998. For a reproduction of folio 159r see O. STRUNK, *Specimina Notationum Antiquiorum*, (*Monumenta Musicae Byzantinae*, pars suppletoria VII), Copenhague 1965, table 12.

<sup>18</sup> In effort to prove that notation did exist in the 8<sup>th</sup> c. Psachos likewise claims that there were liturgical books containing musical signs in that era. In this regard he mentions that in the work *Σμικρά Πραγματεία*, Manuel Chrysaphes writes of an impious emperor who had ecclesiastical books containing musical signs burned during the iconoclastic controversy. Unfortunately, Manuel Chrysaphes' *Σμικρά Πραγματεία* has not yet been brought to light, K. ΨΑΧΟΣ, *Η Παρασημαντική και τα Μαθήματα της Βυζαντινής Μουσικής*, 2<sup>η</sup> έκδοση, Αθήνα 1978, p. 36, see also Π. Ν. ΤΡΕΜΠΕΛΑΣ, *Εκλογή Ελληνικής Ορθοδόξου Υμνογραφίας*, Αθήνα 1978, p. 385.

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The eighth century saw the beginning of important developments in the hymnography of the Eastern Orthodox Church. Both St. John of Damascus and Cosmas, Bishop of Maiouma, were known as melodists

“ώς ἀνήκοντες εἰς τοὺς ποιητάς, οἵτινες καὶ ἐμέλιζον τοὺς εἱρμοὺς καθ' οὓς ταῦτα ἐψάλλοντο”<sup>19</sup>.

A comment made by Theodosius Grammaticus (8<sup>th</sup> - 9<sup>th</sup> c.) regarding the way in which one should compose the Canon is most revealing as regards that period. This comment can be used as one of the arguments substantiating the writing of music at that time. Theodosius Grammaticus mentions that

“έάν τις θέλει ποιῆσαι κανόνα, πρῶτον δεῖ μελίσσαι τὸν εἱρμόν, εἴτα ἐπαγαγεῖν τὰ τροπάρια ἰσοσυλλαβοῦντα καὶ ὁμοτονοῦντα καὶ τὸν σκοπὸν ἀποσώζοντα”<sup>20</sup>.

The word *σκοπός* has at times been subject to various interpretations<sup>21</sup>, but the rendering as “melody”, as initially proposed by Christ, is according to Metsakes the most suitable. Bearing Theodosius’ comment in mind, particularly the phrase “τὸν σκοπὸν ἀποσώζοντα”, there is a possibility that musical notation did exist at that time as a means to preserve musical compositions. But if so, to whom, then, was it known?

The monks of the St. Sabbas Monastery had the double function of melodists and teachers. Here the question rightly arises as to the

<sup>19</sup> Π. Ν. ΤΡΕΜΠΕΛΑΣ, *Ἐκλογή*, op.cit, p. 286.

<sup>20</sup> Κ. ΜΗΤΣΑΚΗΣ, *Βυζαντινή Υμνογραφία, από την εποχή της Καινής Διαθήκης* ἕως την *Εικονομαχία*, Αθήνα 1986, pp. 73-74, 222.

<sup>21</sup> See M. VELLIMIROVIĆ, *The Byzantine Heirmos and Heirmologion*, in *Gattungen der Musik in Einzeldarstellungen. Gedenkschrift Leo Schrade*, hrsg. Von Wulf Arlt, Ernst Lichtenhahn und Hans Oesch unter Mitarbeit von Max Haas, Erste Folge, Francke, Bern und München 1973, pp. 192-244, esp. pp. 193-194.

manner in which the melodists might have been able to store a large number of melodies in their memories as to transmit them to their pupils<sup>22</sup>.

Two principal ways in which a melody accompanying a hymnographic text can be imprinted in the memory have been described: through oral instruction and by the use of a musical notation<sup>23</sup>. The representation of melody in writing, although incapable of reproducing the music itself, can support the memory. Memory, on the contrary, can be considered to replace the written text through the process of memorization. But this process does not automatically lead to simple reproduction but rather to a kind of reconstruction of the melody, as put by Leo Treitler, who adopted the theories of the English psychologist Frederic Bartlett<sup>24</sup>.

If it is assumed, as many scholars do, that there was no notation in that period and that melodies were taught by means of oral tradition alone, one should conclude that the pupil was at the same time composer, for there was no dividing line between the two phases of composition and execution, nor between the capacities of composer and cantor. The execution of the initial melody was slightly altered, for transmission through oral melodic discourse did not permit a hymn to be reproduced exactly, but only to be reconstructed<sup>25</sup>. Thus if a melody is not written down in its initial phase, it will be gradually changed through continuous reconstruction until reaching the point of its final crystallization.

<sup>22</sup> The melodic wealth corresponding to the poetic texts of the Canons made it necessary, we believe, to use mnemonic aids (rudimentary written representation of the melodies). This holds, of course, only in those cases in which the melodist was interested in preserving his melodic compositions.

<sup>23</sup> L. TREITLER, *The Early History of Music Writing*, in *Journal of the American Musicological Society*, 35 (1982), pp. 237-279, esp. pp. 239-241.

<sup>24</sup> L. TREITLER, *Homer and Gregory: The Transmission of Epic Poetry and Plainchant*, in *Musical Quarterly*, LX no3 (1974), pp. 333- 372, esp. pp. 344-345, eg. “remembering is a process not of reproduction but of reconstruction”.

<sup>25</sup> See A. DODA, *Considerazioni sulla “meccanica” delle melodie irmologiche*, in *Studi di musica bizantina in onore di Giovanni Marzi*, ed. Alberto Doda, Cremona 1996, pp. 45-69, esp. p. 25, nota 48.

In the light of the creativity of the St. Sabbas melodists, it seems not likely to us that they did not invent or try to invent a notational system that would help them to record their melodic compositions<sup>26</sup>. Moreover, the ekphonetic system which may have been in use at that time could have provided them with a way to write down music. The fact, however, that this notation was not adopted in musical codices brings us to postulate the existence of some other notational system or systems parallel to that one. Also the use of modal indications, which can be seen in manuscripts dating already from the sixth century, should be taken into account<sup>27</sup>. This means that the melodists imposed a specific mode for the execution of a given hymn, leaving no room for modal change. Thus, to some degree at least, he showed an interest in the fate of his compositions.

The following points constitute a working hypothesis and shows the way in which ecclesiastical music might have been transmitted, at least from the point when structured forms of composition appeared up to the time when the complex oral tradition was committed to one or both of the widespread Paleobyzantine notation types:

- More attention should be given to the Byzantine melodist, who composed both poetic and melodic texts. In addition he taught the art of chanting. Possessing comprehensive knowledge of music, he knew possibly both ancient Greek musical theory and the art of composing in his own era. Even if there was no widespread system for the writing of Byzantine ecclesiastical music, we may suppose that the melodist would have been able, at least individually, to record his own musical creations.
- Transmission from teacher to pupil worked in two ways: through the use of notation and orally.

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<sup>26</sup> Indeed, even the written representation of the melody based on a specific composing technique left room for improvisation and/or reconstruction.

<sup>27</sup> Modal indications are found, for example, in PRyland 466, see C. H. ROBERTS, *Catalogue of the Greek and Latin Papyri in the John Rylands Library at Manchester*, vol. IV, Manchester 1952, p. 32.

- There was a gradual alteration of the melodies from their creation until the point of final crystallization. A review of the musical repertory reveals that as time passed the musical lines often became different. This phenomenon is due to the parallel processes of execution by experienced cantors and transmission of the melodies, and also due to the various local musical traditions.
- Whole repertoires began to be written down in the ninth century, or earlier, and specific types of notation became widespread. The simultaneous use of written and oral transmission was continued by both educated cantors and by those who only received the tradition.

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The notational vacuum (fourth-ninth centuries) put forth in musicological studies does not, in our opinion, necessarily correspond to reality. It is not a matter of sheer chance that hymnography was born in the region of the Byzantine Empire and more specifically in Egypt, Palestine and Syria, nor is it accidental that the fresh data we have provide evidence that music was written down considerably earlier than the time when the use of notation had spread throughout Byzantine territory. Here we must place the use of notation on two different levels. On the first are those systems used in specific geographical areas by specific individuals. These were for example the *Diple* and *Theta* notations as well as the more ancient diastematic system (*Hermoupolis Notation*) found in Egypt in manuscripts of the seventh to ninth centuries, but which may have been used far earlier than the seventh century. This category of writings also includes the *Cypro-Palestinian* Notation, recently identified in a manuscript from the end of the twelfth or early thirteenth century<sup>28</sup>. On

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<sup>28</sup> Although the manuscript bearing this notation dates from the late 12<sup>th</sup> / early 13<sup>th</sup> century, it was probably used in the same area long before the *Coislin* notation appeared. For the Cypro-Palestinian notation see I. ΠΑΠΑΘΑΝΑΣΙΟΥ, *Λειτουργικά*

the other hand *Chartres* and *Coislin* notations which were used on a broad scale, transmitting entire hymnographic corpora of the Eastern Orthodox Church, belong to the second level.

Local efforts to write music have been found mainly in the Byzantine provinces, where the roots of the ninth and tenth-century neumatic notation should be sought. We are thus of the opinion that on a local level notation was used continuously. In this light, further research into local notational systems should be carried out, with a view to elucidating their features and the manner in which they were used in yet greater detail, along with the extent of their impact on the evolution of the widespread Byzantine notational systems.

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περγαμηνά σπαράγματα από το ιδιωτικό αρχείο των Δημητρίου Χρ. Καπαδόχου, in Βυζαντινή Μουσική-Δημοτικό Τραγούδι. Οι δύο όψεις της ελληνικής κληρονομιάς (Πρακτικά των Διεθνούς Συνεδρίου «Βυζαντινή και παραδοσιακή μουσική: Οι δύο όψεις της Ελληνικής μουσικής κληρονομιάς» Κέντρο Ερεύνης της Ελληνικής Λαογραφίας της Ακαδημίας Αθηνών, Αθήνα 10-11 Νοεμβρίου 2000, forthcoming).